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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,374	08/07/2001	Erik Dahlman	8194-585	8934
20792	7590	07/26/2005	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			KUMAR, PANKAJ	
PO BOX 37428			ART UNIT	PAPER NUMBER
RALEIGH, NC 27627			2631	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/923,374

**Applicant(s)**

DAHLMAN ET AL.

**Examiner**

Pankaj Kumar

**Art Unit**

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 5/4/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-70 and 72-108 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 69,70 and 72-85 is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-17, 21-28, 32-37, 45, 46, 49-51, 53, 54, 57-61, 86-89 and 97-108 is/are rejected.
- 7) ☒ Claim(s) 10, 18-20, 29-31, 38-44, 47, 48, 52, 55, 56, 62-68 and 90-96 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed have been fully considered but they are not persuasive.
2. Applicant argues that the threshold device 364 does not test the output of the accumulator 362 and produce a symbol estimate based on the test since the threshold device makes a hard decision of a 0 or 1 to decide the symbol 0 or 1. This is not persuasive. The threshold device makes a hard decision based on a testing of what input has been received and accordingly produces a 0 or 1 symbol estimate.
3. In response to applicant's argument that it is not possible to combine USPN 5572552 with Atarius, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

### ***Response to Amendment***

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2631

5. Claims 1, 12, 32, 50, 53, 58, 86, 99, 2, 13, 100, 3, 14, 101, 9, 27, 49, 57, 60, 88, 107, 15, 21, 97, 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atarius wo-00/35112.
6. Claims 4, 22, 33, 102, 5, 23, 34, 103, 6, 24, 35, 104, 8, 26, 37, 106, 11, 28, 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atarius wo-00/35112 as applied to claims above in view of Held USPN 6463097.
7. Claims 7, 25, 36, 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atarius in view of Held as applied to claims above, and further in view of Uesugi USPN 6,259,721.
8. Claims 16, 17, 45, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atarius wo-00/35112 as applied to claims above in view of Ottosson USPN 6,683,924.
9. Claims 51, 54, 59, 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atarius wo-00/35112 as applied to claims above in view of Takano USPN 6,788,669.
10. Claims 61, 89 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atarius wo-00/35112 as applied to claims above in view of Soleimani USPN 5,208,829.
11. See prior action for details.

***Allowable Subject Matter***

12. Claims 69, 70, 72-85 are allowed. See prior action for details.
13. Claims 10, 18, 19, 20, 29, 30, 31, 38, 39, 40-42, 43, 44, 47, 48, 52, 55, 56, 62, 63-68, 90, 91, 92, 93, 94, 95, 96 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2631

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (571) 272-3011. The examiner can normally be reached on Mon, Tues, Thurs and Fri after 8AM to after 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pankaj Kumar  
Patent Examiner  
Art Unit 2631

PK

  
MOHAMMED GHAYOUR  
SUPERVISORY PATENT EXAMINER